Gulf of Mexico Harmful Algal Bloom Bulletin

5 September 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: August 31, 2006

Conditions Report

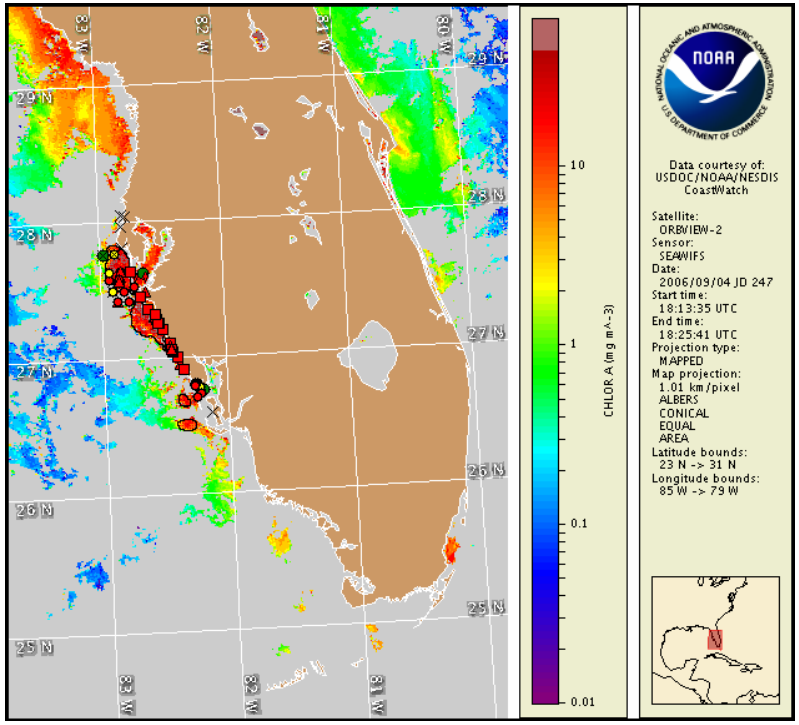
A harmful algal bloom has been identified from southern Pinellas to northern Collier County. The following potential bloom impacts through Thursday are patchy within each county. Southern Pinellas to Northern Charlotte County: Today- High; Wednesday and Thursday- Moderate. Southern Charlotte to Northern Lee County: Today- Moderate; Wednesday and Thursday- Low. Southern Lee to Northern Collier County: Today- Very Low; Wednesday and Thursday- None.

Analysis

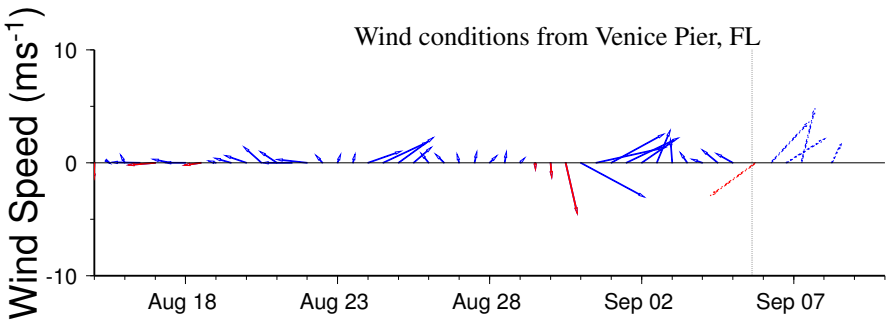
A harmful algal bloom persists alongshore and offshore SW Florida from southern Pinellas to northern Collier County. High concentrations of *K. brevis* continue to be found in Charlotte County at Englewood Beach (FWRI, 8/31). Concentrations remain Medium to High alongshore Sarasota County (8/28), with patches of the county increasing in concentration over the past 10 days (FWRI). Recent satellite imagery is partially obscured by clouds. However, chlorophyll levels are continually high from southern Pinellas to northern Collier County, particularly at the following approximate locations: 27°48.1'N, 82°51.2'W (near northern tip of bloom), 27°36.9'N, 82°54.8'W (western edge offshore Tampa Bay region), 27°16.8'N, 82°43.8'W (offshore Sarasota Co.), 26°31.3'N, 82°22.6'W (offshore Lee Co.), and 26°3.2'N, 81°57.5'W (offshore northern Collier Co.). Results of a wind transport model indicate little net transport of the bloom since 9/1, however northern expansion up to 15km may have occurred over the past 48 hours. Upwelling favorable conditions over the weekend may have intensified nearshore concentrations, particularly in regions where *K. brevis* has recently been confirmed offshore and at depth. Dead fish have been reported over the past few days in Charlotte and Sarasota County.

Mild onshore winds over the next few days may increase the potential for coastal impacts. Although no extensive change in bloom conditions is expected, slight northern transport is possible through Thursday due to seasonal geostrophic flow patterns.

~Fisher, Urizar

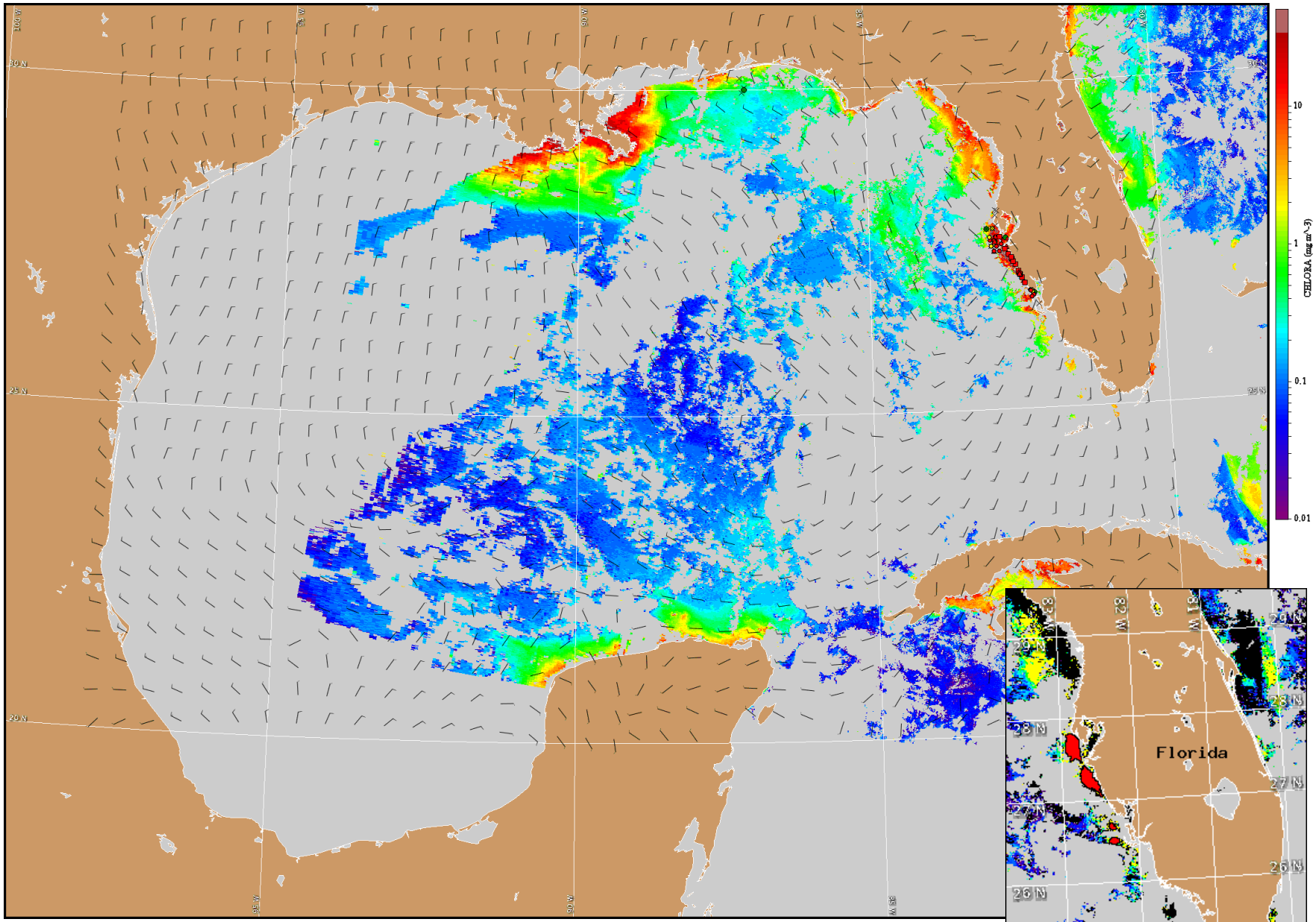


Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 28-September 1 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

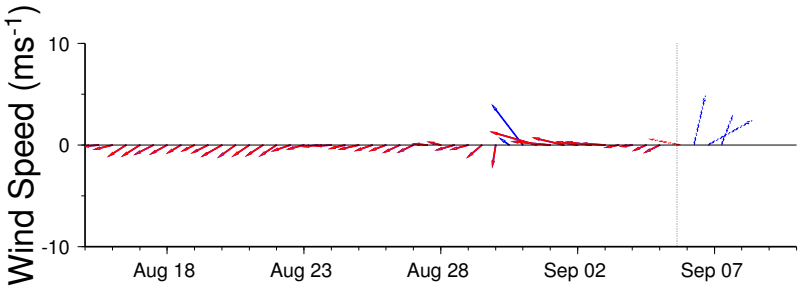
Onshore winds this afternoon (5-10kts; 3-5m/s) becoming more mild (5kts; 3m/s) and northwesterly by Wednesday. Continued mild winds expected to shift northerly Wednesday night, becoming variable into Thursday and northwesterly Thursday afternoon.



Satellite chlorophyll image and forecast winds for September 6, 2006 12Z with cell concentration sampling data from August 28-September 1 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Naples, FL



Wind conditions from Egmont Key, FL